

REMARKS

Favorable reconsideration is respectfully requested in view of the following remarks.

I. CLAIM STATUS

Claims 1 and 3 are pending in this application, and stand rejected.

II. REJECTIONS UNDER 35 U.S.C. §§ 102 & 103

A. Sato (claim 1)

Claim 1 was rejected under 35 U.S.C. § 102(e), as anticipated by or, in the alternative, as obvious under 35 U.S.C. § 103(a) over Sato et al., U.S. Patent No. 5,753,727. See item 3 on page 3 of the Office Action.

This rejection is respectfully traversed for the same reasons set forth on pages 5-7 of the response filed March 3, 2004, the reasons on pages 3-5 of the response filed September 3, 2004 and for the following reasons.

Claim 1 calls for a synthetic chloroprene rubber adhesive composition **consisting essentially of: (1) 100 parts by weight of carboxylated** synthetic chloroprene rubber; and (2) 1-30 parts by weight of chlorinated polypropylene and/or chlorinated polypropylene derivatives. As such, the present invention calls for **carboxylated** chloroprene rubber as the **main** ingredient of the adhesive composition. Moreover, the claims, by way of the “consisting essentially of” language, exclude the presence of large amounts of **uncarboxylated** chloroprene rubber. The presence of large amounts of uncarboxylated chloroprene rubber substantially affects the basic novel properties of the claimed adhesive as will be discussed below.

Sato fails to anticipate the claimed invention, because Sato fails to teach **carboxylated** chloroprene rubber as the **main** ingredient of an adhesive composition in the amounts claimed. Moreover, Sato describes a composition containing large amounts of **uncarboxylated** chloroprene rubber. In particular, Sato discloses an adhesive composition wherein uncarboxylated chloroprene rubber or a 50:50 combination of uncarboxylated chloroprene rubber and carboxylated chloroprene rubber are the main component. Thus, the adhesive composition in Sato contains 50% or more of

uncarboxylated chloroprene. Accordingly, Sato fails to disclose or suggest **carboxylated** chloroprene rubber as the **main** ingredient.

In items 3 and 6 on pages 2-5 of the Office Action, the rejection is maintained, even though the claims are now in “consisting essentially of” format, because it has allegedly not been shown that the material to be excluded (i.e., large amounts of uncarboxylated chloroprene rubber) substantially affects the operability of the invention. In reply, attached herewith is a Rule 132 Declaration by Kazurou Okuzawa.

The data in the Okuzawa Declaration affirms that the composition of the present invention is superior to the prior art composition that the Office alleges to have the same level of adhesive strength. See for instance, page 2 of the second Office Action dated December 3, 2003, wherein it is stated that “[a]s to the chloroprene rubber, carboxyl group containing chloroprene rubbers are clearly disclosed as suitable-note esp. examples 15-17 in table 3.”

The Okuzawa Declaration describes experiments clearly showing that the 50% replacement of the carboxylated chloroprene rubber by the chloroprene rubber, where the carboxylated chloroprene rubber is not the “main component” actually **deteriorates** the adhesive strength of the adhesive composition. Compare the test data for Examples 3 and 4 with that of 5 and 6 in the Table attached to the Declaration. Based on such data, it is evident that large amounts of uncarboxylated chloroprene rubber (i.e., the material to be excluded from the claims) materially effects the basic properties of the resultant adhesive composition. Accordingly, the Declaration supports the fact that the “consisting essentially of” claim format excludes the presence of large amounts of uncarboxylated chloroprene rubber from the claims, because it deteriorates the adhesive properties of the claimed composition. In this sense, the prior art compositions, especially, Examples 15-17 in Table 3 in Sato, clearly do not disclose the adhesive composition of the present invention.

Furthermore, Sato lacks a suggestion to use carboxylated chloroprene rubber as the **main** ingredient, because Sato does not discuss the effect of carboxylated chloroprene rubber on adhesive properties as previously discussed on page 4 of the response filed October 4, 2004.

In fact, Sato **teaches away** from the claimed composition, in that Sato’s composition contains large amounts of **uncarboxylated** chloroprene, which is excluded from the claimed invention.

Thus, contrary to the position in the Office Action, the claims exclude the presence of large amounts of uncarboxylated chloroprene rubber as disclosed in Sato. Therefore, Sato cannot be said to disclose or suggest the use of **carboxylated** chloroprene rubber as the **main** ingredient of the adhesive composition in the amounts claimed.

In view of the above, rejection of claim 1 under 35 U.S.C. §§ 102(e) and 103(a) is untenable, and should be withdrawn.

B. Sato in view of the admitted prior art (claims 3 and 5)

Claim 3 was rejected under 35 U.S.C. § 103(a) as obvious over Sato in view of the admitted state of the prior art. See item 4 on page 3.

This rejection is respectfully traversed for the same reasons noted above.

Again, the claims are in “consisting essentially of” format, and thus, exclude the presence of large amounts of uncarboxylated chloroprene rubber as disclosed in the prior art.

Therefore, the rejection of claim 3 under 35 U.S.C. § 103(a) is untenable, and should be withdrawn.

C. Admitted State of Prior Art in view of Smith, Kirk-Othmer, optionally in view of Sato and/or JP1-153781 (claims 1, 3, and 5)

Claims 1 and 3 were rejected under 35 U.S.C. § 103(a) as obvious over the admitted state of the prior art in view of Smith, U.S. Patent No. 3,347,847 and/or Kirk-Othmer Encyclopedia of Chemical Technology (sections 3.4 and 8.2), and optionally further in view of Sato and/or the Abstract of JP1-153781. See item 5 on page 3.

This rejection is respectfully traversed for the same reasons discussed above, and for the reasons noted below.

The deficiencies of Sato and the alleged admitted state of the prior art have been discussed above previously and are reiterated herein.

As discussed in the previous responses, Smith fails to suggest the use of **carboxylated** chloroprene rubber as an adhesive against polypropylene, let alone as the **main** ingredient in an adhesive in the amounts claimed. Instead, Smith merely discloses a process for isolating a stable

synthetic carboxylated chloroprene rubber, but fails to discuss its adhesive properties against polypropylene.

The Kirk-Othmer Encyclopedia of Chemical Technology discloses that carboxylated chloroprene rubber has good adhesive strength and high temperature cohesive strength. However, this reference fails to disclose or suggest the specific combination of the claimed invention, namely the use of carboxylated chloroprene as the main ingredient.

JP1-153781 describes a liquid type of a conventional self-crosslinking chloroprene adhesive including chlorinated polypropylene. The addition of chlorinated polypropylene is considered known in the art.

However, as previously discussed and as demonstrated in the instant specification, the present invention increases the adhering properties of the conventional adhesive compositions including chlorinated polypropylene. Also, the cited reference fails to disclose or suggest the specific combination of the claimed invention, wherein carboxylated chloroprene is used as the main ingredient.

Further, it is well established that references cannot be combined where a reference teaches away from their combination. See M.P.E.P. § 2145, X, D, 2. As previously discussed above, Sato teaches away from the claimed composition, because Sato's composition requires large amounts of uncarboxylated chloroprene, which is excluded from the claimed invention. Thus, assuming arguendo that the admitted state of the prior art, Smith, and Kirk-Othmer disclose the use of carboxylated chloroprene as the main ingredient in an adhesive composition, which they do not, the references could not be combined in view of the teaching away in Sato.

In view of the above, the rejection of claims 1 and 3 under 35 U.S.C. § 103 is untenable and should be withdrawn.

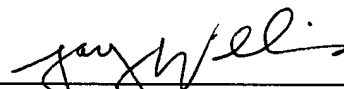
CONCLUSION

In view of the foregoing amendments and remarks, the present application is in condition for allowance and notice to that effect is hereby requested.

If it is determined that the application is not in condition for allowance, the Examiner is invited to telephone the undersigned attorney to expedite prosecution of the present application.

Respectfully submitted,

Kazurou OKUZAWA et al.

By: 
Jay F. Williams
Registration No. 48,036
for
Matthew M. Jacob
Registration No. 25,154
Attorneys for Applicants

MJ/JFW/ksh
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
February 23, 2005

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 23-0975

ATTACHMENT TO THE REPLY:

1. Declaration Under 37 C.F.R. 1.132, by Kazurou Okuzawa (3 pp.).